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Canadian Association of Chiefs of
Police

Brief to the Senate Special
Committee on Science Policy

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BRIEF TO THE SENATE SPECIAL COMMITTEE

ON

SCIENCE POLICY.

BY THE

CANADIAN ASSOCIATION OF CHIEFS OF POLICE, INC.

MARCH, 1969



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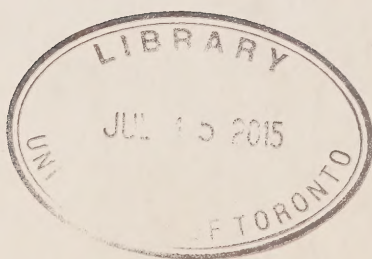
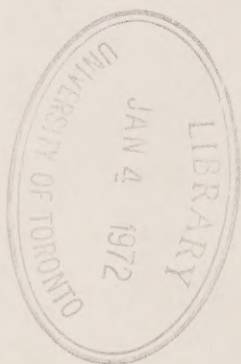


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BRIEF TO THE SENATE SPECIAL COMMITTEE

ON

SCIENCE POLICY

BY THE

CANADIAN ASSOCIATION OF CHIEFS OF POLICE, INC.

A. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

- (I) Economic losses due to criminal activities in Canada cannot be reckoned with any marked degree of precision, but would most certainly, if it were possible to ascertain, reach into millions of dollars annually. However great this may appear, the value pales into insignificance when compared to the value of those basic political, social and religious institutions and freedoms upon which our nation is founded and which the total Canadian law enforcement community is charged to protect and preserve. The formulation of a national science policy without due regard to standing and future urgent needs in the realm of law enforcement science and technology, would therefore be a deplorable mistake.
- (II) While scientific and technological support is an integral and vital necessity for the efficiency and effectiveness of Canadian law enforcement, its practical availability at the operational level (except under emergency conditions) tends to arrive for the most part as a make-do spin-off from other scientific activities rather than as the tailored outcome of a planned and organized support for the development of law enforcement aids.
- (III) No scientific body in Canada appears obliged to provide other than emergency assistance, or to provide

special staff and funding, or to devote an appropriate amount of time and effort in the continuing support of law enforcement bodies. Assistance of such organizations as the National Research Council of Canada must be sought in competition with its other priorities. There is in fact no properly constituted advisory group in Canada to which one may appeal for guidance in the total needs of Canada's law enforcement community, let alone the determination of priorities in relation to other national needs, appropriate levels of effort, funding, and long term plans for essential research and development.

(IV) Other advanced nations that are faced with the challenge of today's organized crime, the growth of civil unrest, the demand for penal reform, the burgeoning needs of modern police and security communications systems, etc., have faced up to the need for organizational restructuring in order to combine the facility to study with the facility to act. Reference is here made to the Home Office Scientific Council of the United Kingdom, whose function it is to advise the Home Secretary on scientific research for the police service including forensic science. In the United States the Law Enforcement Assistance Act was introduced to provide a vehicle for introducing new resources and fostering the development of new and existing law enforcement capabilities in every facet of the problem.

(V) In view of the foregoing circumstances, it is recommended that an appropriately constituted Canadian council of law enforcement science and technology be constituted as a matter of national urgency, and charged with tasks to include at least the following:

- (V) (i) To carry out a review in depth of the organizational preparedness of the total Canadian law enforcement community to meet current and future needs in the art and science of law enforcement.
- (V)(ii) To review Canadian Departmental responsibilities, capabilities, and activities in the evaluation of requirements in law enforcement science and technology, with particular reference to the innovation and support of research and development work, the feedback and evaluation of requirements from the operational level; channels of national co-ordination; funding and long range planning of research and development requirements.
- (V)(iii) To establish a special study group to examine current and future needs for the acquisition, sorting, storage, analysis, retrieval and distribution of law enforcement information with particular reference to the need for a national computerized communication and information net, together with a priority rating in relation to competing demands for satellite communications space.
- (V)(iv) To consider the need for interdisciplinary studies of forensic science with particular reference to the development and evaluation of new scientific tools and techniques, and their introduction into courts of law.
- (V)(v) To review the adequacy of police training facilities in present day technological perspectives, and to consider a national policy for the provision, support, maintenance and utilization of regional training centre facilities.

- (V)(vi) To review the problems of law enforcement in relation to social and political evolutionary trends with reference to civil rights, organized crime, civil unrest, questions of surveillance, and developing areas such as psychological aids to interrogation.
- (V)(vii) To review the need for the development of international co-operation and participation in law enforcement science and technology.
- (V)(viii) To consider means for obtaining the support of academic and scientific institutions, such as, the criminology departments of the University of Montreal, University of Toronto, University of Ottawa, and permanent government departments such as the National Research Council.
- (V)(ix) Among other things to study means of developing:
- (a) through the use of computers and other sophisticated equipment, rapid methods of searching and identification of fingerprints, particularly latent fingerprints;
 - (b) improved methods of radio communication, for example, personal radios for police officers, and miniature or pocket-type recorders for field interviews;
 - (c) improved surveillance equipment;
 - (d) equipment which will automatically pinpoint the location of police vehicles;
 - (e) improved alarm and intrusion detection devices for the purpose of preventing crime;
 - (f) non-lethal aids for the use of the police to quell mob disorders without effecting injury to the participants.

B.

INTRODUCTION

1. This Brief is submitted by the Canadian Association of Chiefs of Police, Inc., a body formed in the year 1905 and incorporated on March 26, 1968, under Part II of the Canada Corporations Act, and whose objects are, namely:-

- (a) to encourage and develop co-operation of all Canadian police organizations and their members in the pursuit and attainment of their common objects;
- (b) to create and develop the highest standards of efficiency in law enforcement through the fostering and encouragement of police training by education and research;
- (c) to promote and maintain a high standard of ethics, integrity, honour and conduct in the profession of law enforcement;
- (d) to encourage and advance the study of modern and progressive practices in the prevention and detection of crime;
- (e) to foster the uniformity of police practices and co-operation for the protection and security of the people of Canada.

2. The membership potential of this organization represents the senior police administrators of 652 municipal police forces, the Quebec Provincial Police, Ontario Provincial Police, Canadian National Railways and Canadian Pacific police forces, National Harbours Board Police and the Royal Canadian Mounted Police. There are 215 senior police administrators included in the current roster as active members in good standing, in addition, there are 23 associate members, 11 honorary members and 107 life members.

3. It goes without saying that the incumbent Board of Directors of this organization not only speaks for this membership at large but is the only organized voice through which their views and those of the authorized strength of 43,724 personnel of police departments of Canada may be represented.

4. In spite of the Association's limited financial resources and without the benefit of a full-time secretariate over the years it has continued its function quite successfully, and more particularly so in recent years. At its Annual Conferences it has brought together police administrators from across Canada for discussion and study of subjects related to the total picture of effective law enforcement. Without the Association there would not be the creation of uniform standards and investigation techniques, the co-operation and co-ordination so necessary in this technologically oriented society with its ever increasing crime, and in particular, organized crime.

5. The Association has accomplished many things, examples are:

- the central repository of criminal records based on the infallible technique of fingerprint identification in the year 1911;
- changes in the Criminal Code of Canada, other federal statutes and provincial acts;
- the retention of serial numbers on motor vehicle chassis, engines and transmissions for the purpose of identifying and tracing stolen automobiles and component parts;
- a Brief to the Canadian Committee on Corrections in the form of answers to questions asked in connection with law enforcement, administration of justice and corrections;

- a Brief to the Royal Commission on Security;
- a Brief to Judge R.A. Sargent's Commission in Vancouver, B.C., on the Invasion of Privacy by Technological and Electronic Devices;
- the distribution of a detailed police training manual to over 250 police forces in Canada with the co-operation of the Metropolitan Toronto Police;
- a Brief and appearance before the House of Commons Standing Committee on Justice and Legal Affairs on a private Member's Bill C-115, an Act to amend the Criminal Code (Destruction of Criminal Records);
- in collaboration with the Dominion Bureau of Statistics developed and implemented a uniform crime reporting statistical system for Canadian police forces covering police administration, crime and traffic enforcement;
- at the request of the Solicitor-General submitted a detailed critique on proposed amendments to the Juvenile Delinquents Act;
- recognizing the threat of organized crime, developed the initial police liaison and communication procedures, and continues to deal with the problem;
- actively participated in the development of the Canadian link with the National Crime Information Centre (computerized exchange of criminal activity information) at Washington, D.C., through the Royal Canadian Mounted Police.

* * * * *

6. On the occasion of the need for a formal presentation and hearing of this Brief, should the Honourable Members of the Special Committee so desire, it can be arranged through the Secretary-Treasurer of the Canadian Association of Chiefs of Police.

* * * * *

C. LAW ENFORCEMENT, SCIENCE AND TECHNOLOGY

7. In March, 1967, the First National Symposium on Law Enforcement, Science and Technology under the sponsorship of the Office of Law Enforcement Assistance, United States Department of Justice and the Law Enforcement Science and Technology Centre, Illinois Institute of Technology, Research Institute, Chicago, Illinois, was held.

8. The purpose of the Symposium was to stimulate the application of science and technology to the areas of Criminal Justice, Law Enforcement, Courts and Corrections by: providing an annual professional forum for the exchange of ideas and information, identifying the relevant capabilities of science and technology; fostering communication between justice and science and engineering communities; publication of proceedings.

9. The fifty police officers from Canada attending the Symposium along with about 1500 police officers from the United States came away with a new outlook on the inter-relationships possible in such an exchange of ideas.

10. Possibly the thing that struck most of the Canadians was why do we have to turn to the United States for forums such as this?

11. Later on in 1967, another Symposium was held in New York City where the objectives were twofold: to inform a mixed professional audience of the state-of-the-art in the application of science and technology in

dealing with crime and criminals; to highlight the principal problems to which science and technology are relevant and thereby stimulate the listeners to either personal or professional involvement in their solution.

12. In July, 1967, the Canadian Association of Chiefs of Police, Inc., wrote to Dr. O.M. Solandt, Chairman, Science Council of Canada, raising the question of the possibility of holding a Canadian Symposium where police officers of Canada would meet with the science and technology communities to review the problem of law enforcement and discover new methods of combatting them.

13. Dr. Solandt replied in part as follows on August 11, 1967:

"There is no doubt that a great need exists to try to bring the resources of the scientific community to bear on helping in the problems of law enforcement."

14. Dr. Solandt subsequently arranged a meeting on our behalf with Dr. W.G. Schneider, President, National Research Council, Ottawa, on January 9, 1968, with representatives from the Canadian Association of Chiefs of Police being: Lt.Col. E.A. Spearing, M.B.E., President, Mr. D.N. Cassidy, Secretary-Treasurer, and Superintendent C.R. Eves, Officer in Charge, RCMP Laboratories.

15. Dr. Schneider was most interested in the concept of holding a Canadian Symposium to stimulate the application of science and technology to law enforcement.

16. Dr. Schneider suggested a steering committee be formed representing the police and the National Research Council.

17. The steering committee revealed there was some duplication between the symposiums held in the United States and meetings of scientific groups. Some of the applications of science, although interesting, were too sophisticated

for the average police department, What law enforcement needed and was looking for were new scientific and technological techniques to assist the police officer in his field duties of patrol and investigation, and not just laboratory applications. That some form of educational program was needed to keep the police informed of new scientific and technological developments which could be applied to their every day work, as well as new methods developed through scientific and technological research to assist law enforcement.

18. The question was how could the scientific and technological communities be encouraged to assist the police and law enforcement in general. No longer satisfactory was the current practice whereby police departments worked independently developing new techniques and where several police departments worked independently on the same projects and unknown to each other.

19. The steering committee reviewed the advances made in recent years in the United Kingdom and the United States to deal with the problems expressed in this Brief. The attention of the Honourable Members is directed to the work of the Office of Law Enforcement Assistance, United States Department of Justice (Appendix II) and the Home Office Scientific Advisory Council in the United Kingdom (Appendix III).

20. This Association strongly feels there must be a means developed in Canada to deal with problems confronting the police and which are of real concern to society. The public must be made aware of what is required so that public opinion will accept new techniques used by the police. There is a real need for an advisory council representing such areas as legal, sociology, medicine,

science and other disciplines. Through an advisory council government, education institutions and industry would be influenced to develop new scientific and technological methods to assist law enforcement. At the moment the police group is a voice crying in the wilderness.

21. As recent as December 10, 1968, Senator Edward M. Kennedy called on Americans to forge new skills of science and technology into an all-out attack on crime. He said "there is no reason why 20th century police, courts and prisons should be shackled with 19th century methods."

* * * * *

22. The primary purpose of this brief is to draw attention to areas of basically scientific and technological problems that are facing the law enforcement community, rather than to argue at this time the minutiae of corrective measures. Nevertheless, this Association is convinced of some specific means by which solutions may be brought about, but which of necessity demand to be brought about within a national frame of reference. It is conceded at the outset, of course, that one cannot deal with law enforcement entirely independently of a host of closely related political, juridical, and sociological problems. It is therefore hoped that the Honourable Members of the Special Committee will deal in the first instance with such of the following observations as fall within your immediate terms of reference; it is hoped in the second instance that you may, if not to accept the full recommendations of this Brief, at least be persuaded to act or make recommendations towards a more comprehensive review of the interacting political, juridical, sociological and technological forces involved in crime prevention, law enforcement and criminal justice.

23. The great difficulty in drafting an abstract of the very wide range of problems facing law enforcement agencies today, is in finding a place to start. We would like to begin with a short reference to Report Number One of the Ontario Royal Commission Inquiry into Civil Rights conducted by the Honourable James Chalmers McRuer, Chief Justice of the High Court of Ontario. That report reveals many circumstances that mitigate against the efficient administration of justice and many points of conflict between the observance of civil rights and the enforcement of law and order. There is one particularly important observation that is made concerning the machinery for the administration of justice which has its corollary in the machinery for law enforcement; that is the supra-regional concept of crime and responsibility. The Commission's vital comments may be extracted from pages 921 et seq., Chapter 60, Volume 2, as follows:

"Is the administration of justice today truly a local matter? We think it is not. It is the view of this Commission that the entire Province benefits from the protection granted by the law and from its efficient administration, and likewise the entire Province suffers from its inefficient administration."

"In the field of criminal law the crime is not committed against the municipality but against the State."

"The administration of justice in its widest sense has passed from being something of merely local concern to a matter of general concern. The provision of adequate and proper facilities to efficiently and effectively administer justice is the common concern and right of every citizen of the Province."

"Some municipalities are more affluent than others. The result has been that some communities are able to provide proper accommodation for the courts and jails, while in other communities, facilities are not only inadequate but such that they demean the administration of justice."

24. What is true for the administration of justice is equally true for the enforcement of law and order: crimes reflect on society beyond the local jurisdiction where they may be committed; crime organizations are not only nation-wide but have international connections; the problems and responsibilities for law enforcement are therefore supra-regional, nation-wide, and many facets are international in scope; it is predictable that disparities comparable to those found in the machinery for the administration of justice are to be found in the economic and technological support of law enforcement units in the towns, municipalities and rural areas across our nation.

25. The DBS in its report on Crime Statistics, 1967¹, the latest available, states there were 1,249,454 offences (excluding highway traffic offences) reported or known to the police in Canada under the Criminal Code, Federal Statutes, Provincial Statutes and Municipal By-laws. Upon investigation by the police, 59,247 or 4.7 per cent were unfounded.

26. Table I illustrates the number of actual offences and the percentage variation for the years 1962-67 inclusive:-

TABLE I
ACTUAL OFFENCES AND PERCENTAGE VARIATION 1962-67

<u>Offences</u>	<u>Year</u>	<u>Number</u>	<u>Percentage Variation Over</u> <u>Previous Year Base Year 1962</u>	
Total - Canada	1962	796,675		
	1963	874,572	+ 9.8	+ 9.8
	1964	960,917	+ 9.9	+20.6
	1965	989,451	+ 3.0	+24.2
	1966	1,094,889	+10.7	+37.4
	1967	1,190,207	+ 8.7	+49.4
Criminal Code	1962	514,986	-	
	1963	572,105	+11.1	+11.1
	1964	626,038	+ 9.4	+21.6
	1965	628,418	+ 0.4	+22.0
	1966	702,809	+11.8	+36.5
	1967	786,071	+11.8	+52.6

(1) DBS Crime Statistics, 1967

cont'd

<u>Offences</u>	<u>Year</u>	<u>Number</u>	<u>Percentage Variation Over</u>	
			<u>Previous Year</u>	<u>Base Year 1962</u>
Federal Statutes	1962	31,138		
	1963	26,677	-14.3	-14.3
	1964	33,791	+26.7	+ 8.5
	1965	30,382	-10.1	- 2.4
	1966	35,994	+18.5	+15.6
	1967	38,100	+ 5.9	+22.4
Provincial Statutes	1962	195,853		
	1963	219,288	+12.0	+12.0
	1964	248,772	+13.4	+27.0
	1965	271,857	+ 9.3	+38.8
	1966	290,096	+ 6.7	+48.1
	1967	296,504	+ 2.2	+51.2
Municipal By-laws	1962	54,698		
	1963	56,502	+ 3.3	+ 3.3
	1964	52,316	- 7.4	- 4.4
	1965	58,794	+12.4	+ 7.5
	1966	65,990	+12.2	+20.6
	1967	69,532	+ 5.4	+27.1

27. There were 554,852 persons reported charged by the police² in Canada during 1967 compared with 520,979 reported in 1966. The majority of persons were charged with Provincial Statutes offences (49.7 per cent) and Criminal Code (36.2 per cent) offences. (These data do not include persons charged with offences involving highway traffic and parking violations)³.

28. The above data amply demonstrates the growth and seriousness of the crime situation in Canada and the very desirable need to bring the full impact of the scientific and technological communities to bear upon this critical situation, in addition to other methods.

29. In the Summary to the Report by the President's Commission on Law Enforcement and the Administration of Justice "The Challenge of Crime in a Free Society"⁴ 1967, the most recent and penetrating study of crime in the United States it is stated:

(2) DBS Crime Statistics, 1967

(3) DBS Traffic Enforcement Statistics, 1967

(4) The Report of the President's Commission "The Challenge of Crime in a Free Society" p. v and vi of Summary, February, 1967.

" Many Americans take comfort in the view that crime is the vice of a handful of people. This view is inaccurate. In the United States today, one boy in six is referred to the juvenile court. A Commission survey shows that in 1965 more than two million Americans were received in prisons or juvenile training schools, or placed on probation. Another Commission study suggests that about 40 percent of all male children now living in the United States will be arrested for a nontraffic offense during their lives. An independent survey of 1,700 persons found that 91 percent of the sample admitted they had committed acts for which they might have received jail or prison sentences.

Many Americans also think of crime as a very narrow range of behaviour. It is not. An enormous variety of acts make up the "crime problem." Crime is not just a tough teenager snatching a lady's purse. It is a professional thief stealing cars "on order." It is a well-heeled loan shark taking over a previously legitimate business for organized crime. It is a polite young man who suddenly and inexplicably murders his family. It is a corporation executive conspiring with competitors to keep prices high. No single formula, no single theory, no single generalization can explain the vast range of behaviour called crime.

Many Americans think controlling crime is solely the task of the police, the courts, and correction agencies. In fact, as the Commission's report makes clear, crime cannot be controlled without the interest and participation of schools, businesses, social agencies, private groups, and individual citizens.

What then, is America's experience with crime and how has this experience shaped the Nation's way of living? A new insight into these two questions is furnished by the Commission's National Survey of Criminal Victims. In this survey, the first of its kind conducted on such a scope 10,000 representative American households were asked about their experiences to the police, and how those experiences affected their lives.

An important finding of the survey is that for the Nation as a whole there is far more crime than ever is reported. Burglaries occur about three times more often than they are reported to police. Aggravated assaults and larcenies over \$50 occur twice as often as they are reported. There are 50 percent more robberies than are reported. In some areas, only one-tenth of the total number of certain kinds of crimes are reported to the police. Seventy-four percent of the neighborhood commercial establishments surveyed do not report to police the thefts committed by their employees.

The existence of crime, the talk about crime, the reports of crime, and the fear of crime have eroded the basic quality of life of many Americans. A Commission study conducted in high crime areas of two large cities found that:

43 percent of the respondents say they stay off the streets at night because of their fear of crime.

35 percent say they do not speak to strangers any more because of their fear of crime.

21 percent say they use cars and cabs at night because of their fear of crime.

20 percent say they would like to move to another neighborhood because of their fear of crime.

The findings of the Commission's national survey generally support those of the local surveys. One-third of a representative sample of all Americans say it is unsafe to walk alone at night in their neighborhoods. Slightly more than one-third say they keep firearms in the house for protection against criminals. Twenty-eight percent say they keep watchdogs for the same reason.

Under any circumstance, developing an effective response to the problem of crime in America is exceedingly difficult. And because of the changes expected in the population in the next decade, in years to come it will be more difficult. Young people commit a disproportionate share of crime and the number of young people in our society is growing at a much faster rate than the total population. Although the 15 to 17 year-old age group represents only 5.4 percent of the population, it accounts for 12.8 percent of all arrests. Fifteen and sixteen year olds have the highest arrest rate in the United States. The problem in the years ahead is dramatically foretold by the fact that 23 percent of the population is 10 or under.

Despite the seriousness of the problem today and the increasing challenge in the years ahead, the central conclusion of the Commission is that a significant reduction in crime is possible if the following objectives are vigorously pursued:

First, society must seek to prevent crime before it happens by assuring all Americans a stake in the benefits and responsibilities of American life, by strengthening law enforcement, and by reducing criminal opportunities.

Second, society's aim of reducing crime would be better served if the system of criminal justice developed a far broader range of techniques with which to deal with individual offenders.

Third, the system of criminal justice must eliminate existing injustices if it is to achieve its ideals and win the respect and cooperation of all citizens.

Fourth, the system of criminal justice must attract more people and better people - police, prosecutors, judges, defense attorneys, probation and parole officers, and corrections officials with more knowledge, expertise, initiative, and integrity.

Fifth, there must be much more operational and basic research into the problems of crime and criminal administration, by those both within and without the system of criminal justice.

Sixth, the police, courts, and correctional agencies must be given substantially greater amounts of money if they are to improve their ability to control crime.

Seventh, individual citizens, civic and business organizations, religious institutions, and all levels of government must take responsibility for planning and implementing the changes that must be made in the criminal justice system if crime is to be reduced."

30. A fact not to be lost sight of is that many of the techniques and products of our technological age can be as readily adapted and directed to the promotion of criminal activities as to their detection. The police officer tends to become more and more a technician who must be provided with technical training and technical aids that will allow him to carry out his operational responsibilities competently and where necessary, gather and select with discrimination, evidence that must be passed to the laboratory for scientific opinions. As between the protection of the rights of the individual and the enforcement of law and order in this technological squeeze, modern society must find a means to have its cake and eat it. This Association is convinced that this is not an impossible task provided the problem is reviewed in its national perspective, and that intelligent planning and support is made available on the urgent basis it demands.

31. The DBS Police Administration Statistics⁵, 1967 states that there were 42,541 persons employed in 1967 in the various police forces across Canada, an increase of 5.4 per cent over the 40,368 reported in 1966. The number of actual police officers totalled 35,881 for 1967 compared with 34,069 in 1966, a rise of 5.3 per cent.

32. It goes without saying that the most expensive commodity in any organization is the cost of manpower, and if these costs can be reduced by the application of

(5) DBS Police Administration Statistics, 1967

scientific and technological means every effort must be made to employ them.

33. Again to quote from the Report of the President's Commission "The Challenge of Crime in a Free Society"⁶ 1967, it is stated:

" The Scientific and Technological revolution that has so radically changed most of American society during the past few decades has had surprisingly little impact upon the criminal justice system. In an age when many executives in government and industry, faced with decisionmaking problems, ask the scientific and technical community for independent suggestions on possible alternatives and for objective analyses of possible consequences of their actions, the public officials responsible for establishing and administering the criminal law - the legislators, police, prosecutors, lawyers, judges, and corrections officials - have almost no communication with the scientific and technical community.

More than two hundred thousand scientists and engineers are helping to solve military problems, but only a handful are helping to control the crimes that injure or frighten millions of Americans each year. Even small businesses employ modern technological devices and systems, but the Nation's courts are almost as close to the quill pen era as they are to the age of electronic data processing. The police, with crime laboratories and radio networks, made early use of technology, but most police departments could have been equipped 30 or 40 years ago as well as they are today. Hospitals and clinics draw heavily upon the most recent developments in engineering and medical science, but the overwhelming majority of reformatories, jails and prisons are, technologically speaking, a century or more in the past.

This lack of contact between criminal justice and science and technology is true even in the Federal Government, where, as recently as 1965, the Justice Department was the only Cabinet department with no share of the roughly \$15 billion Federal research and development budget."

34. The President's Commission, in collaboration with the Office of Law Enforcement Assistance, established a task force on science and technology in April, 1966. The task force was given the job of showing how the resources of science and technology might be used

(6) The Report of the President's Commission "The Challenge of Crime in a Free Society", Chapter 11, Science and Technology, p. 245

to solve the problems of crime. It found that within the criminal justice system, the greatest potential for immediate improvement by technological innovation appeared to be in police operations.

35. The Commission's report⁷ states:

" Of all criminal justice agencies, the police traditionally have had the closest ties to science and technology, but they have called on scientific resources primarily to help in the solution of specific serious crimes, rather than for assistance in solving general problems of policing. The task force focused its efforts on some illustrative applications of science and technology to the broad problems of police operations.

The police control crime primarily by apprehending criminals and by posing a convincing threat of apprehension. The apprehension process begins either with the detection of a crime by patrol or by a report to the police, followed by the dispatch of police to the scene. Then come search, investigation, interrogation, data gathering, suspect checkouts and arrest, sometimes followed by more investigation and assistance in prosecution. The police field operations centering around apprehension are closely tied to technology. Automobiles, radios, crime laboratories, scientific investigation, and police weaponry are essential technical aids to the operations of a modern police force.

Science and technology can improve the capabilities of the police in the apprehension process."

36. The recommendations of the Commission on the application of science and technology to the criminal justice agencies commencing at p. 248⁸.

37. The proceedings of the First Interamerican Conference on Legal Medicine and Forensic Science were published in 1964 with editorial comments by Professor Larry Alan Bear of the School of Law, University of Puerto Rico⁹. These proceedings are notable in the present context for both their international and Canadian content. In these proceedings, reference was made to an interesting statistic that was derived from two hundred responses to question-

(7) Ibid p. 247

(8) Ibid p. 248

(9) Law, Medicine, Science and Justice.

Larry Alan Bear, Conference Director and Brian Parker, Assoc. Editor, Charles C. Thomas Pub. Springfield, Illinois, U.S.A. 1964.

aires solicited in ten countries, relating to scientific crime detection services at national and local levels.

In his comments, Professor Bear reveals¹⁰ that it had been shown that under the most effective operating conditions in any country, 98% of all criminal cases were never subjected to any scientific examination.

38. The late Dr. H. Ward Smith, Attorney General's Laboratory, Toronto, Canada, speaking¹¹ to the same conference on "Forensic science in Canada", presented the analysis of Ontario Criminal cases here reproduced as Table II. The sordid facts are simply that out of 167,238 cases of crime detected in 1960, 67,731 were concluded and only 7,241, or 4.3% of the total, made recourse to laboratory assistance.

TABLE II

ANALYSIS OF ONTARIO CRIMINAL CASES 1956-60

	1956 Cases				1960 Cases			
	Known	Concluded	Lab.	% of Known	Known	Concluded	Lab.	% of Known
er	42	40	36	86	53	35	48	90
empt murder								
laughter								
. Negligence	22	22			115	97		
on Assault	2,344	1,873			3,103	2,134		
Total	2,366	1,895	19	0.8	3,218	2,231	64	2
cent Assault								
empt rape	640	482	88	14	1,266	724	144	11
ery, Break								
ter-Theft	54,950	13,513	66	.12	101,279	20,602	242	.24
ery, Fraud	Not listed		4		8,836	3,718	308	3.4
ellaneous								
inal Code								
fic	8,380	7,773	1,207*	14*	15,463	14,724	6,296*	41*
er	28,450	20,403	82	0.3	37,123	25,697	139	0.5
Total	94,828	44,106	1,502	1.6	167,238	67,731	7,241	4.3

* Breathalyzer Cases - 1956-300 1960-5,182

(10) Ibid p. 428

(11) Ibid p. 458

39. It is generally agreed by forensic scientists that in crimes involving bodily contact, such as attempted murder, manslaughter, criminal negligence and common assault, there is an opportunity for the exchange of types of physical evidence (or "signatures") that is subject to detection by modern scientific methods.

40. Wilson and Roberts¹² speaking on the natural signature of chemicals and chemical dispersion systems, supply the following description of the trail left by an automobile:

" A moving automobile is already a form of chemical disperser. Each mile it leaves a trail of approximately 700 g of gasoline combustion products, including more than 0.1 g of lead; 2 g of respiration products from each passenger; 1 g of lubricating oil products; 0.4 g of tires; and variable but typically lesser amounts of metal particulates, lubricant drippings, paint flecks, upholstery fibers, abraded brake lining, anti-freeze volatiles, electrical insulation degradation products, etc. While each car undoubtedly has a fully individual chemical signature, the identification problem is simplified if a known chemical marker can be caused to be left by the vehicle. When there is a brief period of access to the car of interest, the tracer can be added to existing components or simple attachments can be made".

41. There exists at the present time a scientific capacity or developable potential to detect these minor traces of matter. High flux neutron activation analysis is a tremendously powerful forensic tool with a capability for detecting traces of elements of the periodic system that may comprise less than one part per million in a sample substance. However, the material must be irradiated in a reactor or neutron accelerator. X-ray fluorescence offers a lesser degree of sensitivity and while limited to near surface analysis, is portable and potentially of great value to in-field investigators.

(12) E. Milton Wilson and R.M. Roberts.
Chemical techniques for marking and tracking.
Page 364, Vol. 1, Proceedings of the First National
Symposium on Law Enforcement Science and Technology,
Thompson Book Company, Academic Press, 1967.

42. Despite the existence of these aids, or their developability, the late Dr. Ward Smith's analysis (Table 11 above) indicates that only a minor percentage of crimes involving physical contact and detectable trails are given scientific or laboratory attention, and greater than half remain unsolved.

43. Having referred in their lecture to biological experiments dealing with the incredibly sensitive olfactory processes of certain insects and animals, Wilson and Roberts (loc. cit. page 363) continue with the following classic summing up of the technical aspects of our present situation:

"In terms of man-equivalent body lengths, we live in a world where tracking occurs routinely up to 3000 miles and perhaps as far as 7000 miles. Yet how often is a human suspect under surveillance lost within one moderately crowded city block? How often does the law enforcement community have the knowledge of the path of a vehicle for a relatively short distance from a known starting point, such as a ransom drop site? How long must man rely on a "dumb" animal to relocate an escaped prisoner? Potential answers to these problems exist within present scientific knowledge, a selected few of which are explored further herein."

44. It would appear that this bottle-neck in the solution of criminal activities could be ameliorated and largely eliminated with an appropriate program of research and development.

45. But that is only one of many areas in which we are failing to apply or capitalize on existing levels of scientific and technological developments. The testing and evaluation of new aids and equipment and the analysis of their efficacy should be carried out with the utmost attention to proven scientific methods. The use of chemical mace in the United States has pointed up a typical example of shortcomings in observational control. It is reported¹³

(13) Joseph F. Coates. Safe Police Weapons, p. 59, Science and Technology, May 1968.
(Originally an industrial chemist Mr. Coates served as consultant to the President's Commission on Law Enforcement Science and Technology and is a senior staff member in the Scientific & Technical Division of the U.S.A. Institute for Defense Analyses).

that some 3000 police forces in the United States now employ mace and that it had, through November 1967, been used in approximately 1400 instances.

"In spite of all this, (ibidem page 59) it is nearly impossible to find organized data on the consequence of the use of the weapon, its risks, opportunities, the changes it has wrought in police action. Aside from the release of selected anecdotes, either celebrating or disparaging its employment, data are almost unavailable."

46. This example clearly demonstrates what can happen when the scientifically established procedural cycle for the research, development, test, and evaluation of technical products is by-passed. It is imperative that technical preparedness be established and maintained for systematic and uniform evaluation methods as well as for technical, medical and tactical standards for the introduction of new devices and techniques. This kind of thing cannot be implemented piecemeal by police groups, but must be catalyzed at the national level.

47. It is not sufficient to see that the police agencies are properly equipped and trained, but steps should be taken to ensure that competent technical police work is not finally cast aside in the face of less competent adversary opinion in our courts. This can happen under Canadian rules of evidence where the prosecution and defence counsels may challenge each other's technical evidence on the basis of witnesses whose competence may be judged by a non-technical person on the basis of a very superficial exposition of credentials. It is not conceded by forensic scientists that the correct answer can be the

average of a competent and an incompetent opinion. The Honourable Chief Justice McRuer (loc. cit.) has neglected to offer guidance on this tricky problem even though he discourses to a considerable extent on the form and discipline of self-governing professions and societies who may be deeply involved.

48. Dr. Constantine J. Maletskos¹⁴, speaking before a group of specialists in forensic analysis on the problems and pitfalls associated with the introduction and use of new scientific methods in court, recently proposed a committee system for the approval and accreditation of a scientific method before it is introduced into court. Going even beyond the national character that an approving body would have to reflect, Dr. Maletskos recognizes also a desirable international complexion.

"To be effective", he proposed, "the certification would consider all aspects of the scientific method, and particularly, would take cognizance of the ultimate uses of the method. Thus, items to be considered in the certification would include an evaluation of the basic principles and concepts of the method, the capabilities of equipment and procedures, the assessment and control of difficulties, and the delineation of pitfalls, and, most importantly, the applicability to appropriate legal end-points."

"In its general sense, the approving body would be a national body, perhaps even an international body, composed not only of scientists but also of persons associated with law and law enforcement. Irrespective of how the appropriate persons become members of the body, this body would be impartial and have complete independence, with no ties to any specific organization, administratively or financially. The body would have full authority for its decisions, the courts having given their sanction for its existence."

(14) Dr. Constantine J. Maletskos. On the Introduction of New Scientific Methods in Court. First International Conference on Forensic Activation Analysis, San Diego, California. (Dr. Maletskos is associated with the Department of Legal Medicine, Harvard University, and with the Cancer Research Institute, New England Deaconess Hospital).

49. In proposing a national body to examine technical police problems and the employment of technical aids for the pursuit of criminal justice, the Canadian Association of Chiefs of Police is therefore not proposing anything new or ultra radical, but things which our scientific and legal colleagues already recognize to fall within the course of rational progress.

50. By the Law Enforcement Assistance Act of 1965, (Appendix II) the United States took a first giant stride in the direction of modernizing its attitudes and approaches to modern crime and social unrest. Up to this point there had been no federal commitment to assistance in local law enforcement and crime control problems. The Act has operated¹⁵ to stimulate activity and improvements in segments of the criminal justice process: police, courts, corrections, prevention research, study, planning, citizen action, organizational improvement, scientific and technological development.

51. The programme which is outlined in some detail in Appendix II has consisted of three essential parts:

- (a) A comprehensive survey of potential application of science and technology to the agencies, methods, and problems of crime control.
- (b) Two national symposia bringing the scientific and law enforcement communities in dialogue on first, general problem definition; second, exploratory excursion into specific problem areas.
- (c) Research and development projects divided among: general information system design development; application of computer, operations research and ADP technology to specific operational and management problems; development of laboratory techniques and capabilities.

(15) Daniel I. Skoler, Office of Law Enforcement Assistance, United States Department of Justice, Washington. Paper entitled "Federal Assistance in Developing the Technology of Criminal Justice". First International Symposium on Law Enforcement Science and Technology loc. cit.

52. Also in 1965, the United Kingdom endeavoured to effect a similar reorganization and stimulation of its machinery for criminal justice by introducing the Home Office Scientific Council (Appendix III).

53. An immediate product of the United States' programme was a survey of crime laboratories and a report¹⁶ on studies to develop curricula for forensic science training. The survey showed the existence of approximately 110 non-federal laboratories in the United States, and these were sampled to determine the personnel and equipment needs of additional laboratories that would be required to put laboratory services within reach of virtually all law enforcement agencies in the United States. Noteworthy of the conclusions reached are those concerning what the Board considered would constitute a model regional crime laboratory as follows:

"A model regional crime laboratory as determined by the Advisory Board for this project would serve 500,000 to 1,000,000 people in an area where there are 5,000 Part I offenses per year. In accordance with the Crime Commission Report, all Part I crimes should be processed by a laboratory. Such a laboratory would have to be within two hours driving time of any point in its jurisdiction, and in sparsely settled areas, within two hours flying time from any point in its jurisdiction. The laboratory would offer complete technical services and analyses in the following fields: (1) Physiological fluids . . . (2) Hairs and fibers and other trace evidence . . . (3) Comparative microscopy. . . (4) Wet chemistry. . . (5) Instrumental analysis. . . (6) Document examination, writings, typewriting. . . (7) Polygraph. . . (8) Photography. . . (9) Latent prints. . . (10) Crime scene services. The Board of Consultants decided that the number of scientific personnel required to operate a regional laboratory which would provide the laboratory functions just enumerated is 12 to 20 scientific personnel. Such a laboratory

(16) Dr. Alexander Joseph. O.L.E.A. Project No. 013 Report: Study of Needs and the Development of Curricula in the Field of Forensic Science.
(Dr. Joseph is associated with the John Jay College of Criminal Justice, University of New York).

would require a capital budget of approximately \$200,000. This amount of money would provide for a library, furniture and fixtures, comparison microscopes, a polarizing microscope, stereo microscopes, x-ray diffraction unit, emission spectrometer, infrared spectrophotometer, electrophoresis equipment, ultra-violet spectrophotometer, an analytical gas chromatograph, mobile units including trucks, equipment and supplies and miscellaneous photographic equipment."

54. If we accept the same laboratory dispersal factor for Canada, with an area of 3.9 million square miles, the Joseph formula suggests that Canada could use 144 laboratories. We do not suggest that such a number at \$200,000.00 per installation is really needed here yet, but the actual requirement should be investigated because a serious requirement does exist.

55. A further observation of the report is that, given the necessary staff, training facilities, and graduated technical and scientific people, there is the important factor of keeping their knowledge up to date. The single most valuable method for doing this is attendance at professional meetings such as the Academy of Forensic Science, the Symposia on Science and Technology supported by the Office of Law Enforcement Science and Technology, and others. This fact has been recognized in Canada for some time, and we have endeavoured to encourage and assist our people to attend such meetings. One cannot overemphasize the value of professional contacts made at such conferences and their value to international cooperation. It is our earnest hope to achieve a suitable type of Canadian symposium on law enforcement science and technology and in this enterprise, as already stated, we have asked and are receiving the advice and assistance of the National Research Council. It is important that funds be forthcoming both to assist the

organization of such conferences and the attendance of law enforcement people from the length and breadth of the country.

56. A final point made by the Joseph report concerns sources of assistance that are ferreted out by law enforcement officers in scientific and academic institutions. Usually such assistance is based on professional personalities as, for example, university professors and specialist workers. While law enforcement officers are pleased to have this assistance and benefit by it, the loss of these contacts causes a loss of continuity in the assistance, and sometimes even a loss of capabilities. Hence what is needed is support for well founded departments such as the criminology departments at the University of Montreal, University of Ottawa, University of Toronto, and permanent government departments such as the National Research Council.

57. The electronic computer is both the heart and the handmaiden of modern information and communications media, and the capabilities which it makes available to law enforcement, already being exploited in many quarters, hold a wealth of as yet untapped and unexplored possibilities. We could not here hope to reveal more than a glimpse of the sophisticated workings of this tremendous area of aid which by its very nature must be considered in a completely national context. By this we do not mean to isolate the local police units from it, but rather to integrate the national police community in its entirety, right down to the law officer on the beat. Modern information

networks are able to assimilate, store, correlate and retrieve literally millions of pieces of information whose relationship and use would otherwise be limited or lost in our conventional forms of data handling which use the human coordinator. Thus it would be possible to put a critical piece of information originating at Vancouver through to a "walkie-talkie" on the outskirts of Montreal and back before a suspicious action has time to mature.

58. Superintendent O.W. Wilson, former head of the Chicago Police Department¹⁷ has made a very strong appeal to put police officers where crimes are most likely to occur with the equipment, techniques and services that are most likely to prevent crime or apprehend the criminal at the scene. In this, every law officer would concur. Suitable equipment in crime prevention is usually equipment that gives information and in this sense, a small fact stored away in a national computer-controlled pool, can place vital information in the ear of a recipient within a properly organized communications net. Superintendent Wilson (ibid) casts us an interesting statistic on the value of rapid communication:

"A study made 29 years ago indicated that if the police could respond to an emergency call within 30 seconds there was a 76 percent chance that they would apprehend the criminal. If they delayed longer than 90 seconds the chance of apprehending the offender at the scene fell to 26 percent. A recent study by the President's Crime Commission produced similar results."

(17) O.W. Wilson, Crime Prevention - Whose Responsibility? First National Symposium on Law Enforcement Science and Technology (loc. cit.)

59. What holds true for the presence of a police officer holds equally true for the presence of information in the right place at the right time. Taking into account the kind of information police use, such as criminal records, vehicle license identification, trial records and laboratory data, and bearing in mind that criminals move widely and quickly, or may be guided by distant colleagues, the need for centralized information storage with ready access from remote points, modern communication and information handling methods are a must in police organization. It is therefore urged that a study of this area of law enforcement aid should be carried out on a national basis.

60. In concluding, the Association would like to make a brief reference to the area of new problems that are generated by political events and social trends. In many instances, policies must first be formulated before acceptable technical means to carry them out can be determined. Invasion of privacy is raised as an objection to attempts by police at search or surveillance, sometimes on the grounds of principle and sometimes on the grounds of technical practice. The latter type of objection is subject to avoidance by research and development of technical equipment that does not embarrass or affront the individual.

61. The Criminal Code authorizes a police officer to search the person for offensive weapons, but only where he believes on reasonable grounds that an offence is being committed or has been committed with respect to it. Bearing this and the question of invasion of privacy in mind, airlines and the general public are clamouring for surveillance and the disarming of passengers who may carry

weapons and explosives on board aircraft. This implies the need for an effective though socially acceptable device of a sort that might also be used in other instances where an unidentified individual carrying a concealed weapon may be mingling in a crowd or negotiating a public area.

62. There is a good deal of sympathy in some quarters with the idea of compelling the public to use anti-crime devices in circumstances where there is a strong element of temptation or attraction to public mischief and crime. Again there is the question of constitutional rights. How far is the jump from requiring car owners to remove the ignition keys from their parked cars to requiring burglar alarms and other devices in their homes? Is there an economic technical answer that will permit citizens to be protected where they wish it?

63. In recent times there has been a growth in medical and psychological aids to interrogation, some of which are legally unacceptable, some of which are technically unsound, and others which hold promise but require development and evaluation. "Truth" drugs, alcoholic intake analysers, galvanic response meters, etc. are typical instruments of aid to police investigators, but require a tremendous amount of scientific study and analysis to render their operation certain and accurate for use in the pursuit of criminal justice. It is important that staff, facilities, and funds be made available for furthering progress in this area.

64. To summarize the important points which we would like to leave with the Senate Special Committee for consideration, crime is big business and has at its command the same technology that is or should be available to

police agencies. In many instances organized crime is ahead and better equipped for its function than the majority of local or regional police agencies. When one considers the whole gamut of criminal activities, including theft, conversion, business manipulations, property destruction, gambling and other forms of racketeering, etc., which together provide dependable incomes and security for an embarrassingly large section of society, one is faced with an astronomical bill for the law abiding taxpayers. Attempts to put an exact figure to this loss has resulted in estimates from 5 to 50 billion dollars¹⁸ per annum in the United States and this wave of crime more than washes at the border of Canada.

65. The problems confronting law enforcement agencies are therefore supra-regional and must be studied and attacked on a national and even international scale. There are so many facets to the problem - political, juridical, socialological and technological - that what is required at the present time is a nationally constituted committee of disciplinary experts in science, law, medicine, etc. to study the state of national organization and preparedness, priorities, and scientific support policies. The work of the police forces must be assisted by adequate forensic laboratories, and with permanent facilities to carry out research and development on scientific and technological aids. The police must be given nation-wide communications and information systems, and facilities for modern technical training

(18) Peter D. Andreoli, Assistant District Attorney, New York County, New York, speaking on "Organized crime enterprises - legal". First National Symposium on Law Enforcement Science and Technology (loc.cit.)

to handle the job they are expected to carry out. More critical and constructive attention must be given to devising acceptable means to combat the problems posed by political events and social evolutionary trends; people qualified to deal with the analysis of these problems and who can promote the scientific and technical support needed by police agencies should be made available in the universities and appropriate government departments.

D. RECOMMENDATIONS

66. It is therefore specifically recommended that an appropriately constituted Canadian council of law enforcement science and technology be constituted as a matter of national urgency, and charged with tasks to include at least the following:

- (a) To carry out a review in depth of the organizational preparedness of the total Canadian law enforcement community to meet current and future needs in the art and science of law enforcement.
- (b) To review Canadian Departmental responsibilities, capabilities, and activities in the evaluation of requirements in law enforcement science and technology, with particular reference to the innovation and support of research and development work, the feedback and evaluation of requirements from the operational level; channels of national coordination; funding and long range planning of research and development requirements.
- (c) To establish a special study group to examine current and future needs for the acquisition, sorting, storage, analysis, retrieval and distribution of law enforcement information with

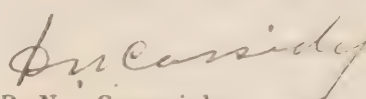
particular reference to the need for a national computerized communication and information net, together with a priority rating in relation to competing demands for satellite communications space.

- (d) To consider the need for interdisciplinary studies of forensic science with particular reference to the development and evaluation of new scientific tools and techniques, and their introduction into courts of law.
- (e) To review the adequacy of police training facilities in present day technological perspectives, and to consider a national policy for the provision, support, maintenance and utilization of regional training centre facilities.
- (f) To review the problems of law enforcement in relation to social and political evolutionary trends with reference to civil rights, organized crime, civil unrest, questions of surveillance, and developing areas such as psychological aids to interrogation.
- (g) To review the need for the development of international co-operation and participation in law enforcement science and technology.
- (h) To consider means for obtaining the support of academic and scientific institutions, such as the criminology departments of the University of Toronto, University of Montreal and University of Ottawa, and permanent government departments such as the National Research Council.
- (i) And among other things to study means of developing:

- a. through the use of computers and other sophisticated equipment, rapid methods of searching and identification of fingerprints, particularly latent fingerprints;
- b. improved methods of radio communication, for example, personal radios for police officers, and miniature or pocket-type recorders for field interviews;
- c. improved surveillance equipment;
- d. equipment which will automatically pinpoint the location of police vehicles;
- e. improved alarm and intrusion detection devices for the purpose of preventing crime;
- f. non-lethal aids for the use of the police to quell mob disorders without effecting injury to the participants.

* * * * *

Dated at Ottawa, Ontario, Canada, this 1st day of March, A.D., 1969, and signed for and on behalf of the Canadian Association of Chiefs of Police by


D.N. Cassidy,
Secretary-Treasurer.

APPENDIX I

CANADIAN ASSOCIATION OF CHIEFS OF POLICE, INC.

1. Letters Patent, incorporating the Canadian Association of Chiefs of Police, under Part II of the Canada Corporations Act were issued on March 26, 1968, and recorded May 17, 1968. Film 220, Document 151, by the Deputy Registrar General of Canada.

2. Board of Directors.

Officers:

President	Chief C. Einfeld, East Kildonan, Man.
1st Vice-President	Chief A.G. Cookson Regina, Sask.
2nd Vice-President	Chief F.G. Carroll, London, Ont.
3rd Vice-President	Director J.P. Gilbert, Montreal, Que.
Immediate Past President	Lt.Col. E.A. Spearing, M.B.E., Director of Investigation, Canadian National Railways, Montreal, Que.
Secretary-Treasurer	Director D.N. Cassidy, Police and Security, National Harbours Board, Ottawa, Ont.

Directors:

Chief M.A. MacBrayne,
West Vancouver, B.C.

Commissioner Eric Silk, Q.C.
Ontario Provincial Police,
Toronto, Ont.

Deputy Commissioner W.H. Kelly,
Royal Canadian Mounted Police,
Ottawa, Ont.

Chief S.D.A. Wannamaker,
Summerside, P.E.I.

3. Standing Committees:

Auto Theft	Law Amendments
Communications	Nominations
Constitution	Organized Crime
Credentials	Resolutions
Crime in Industry	Selection and Training
Crime Prevention and Juvenile Delinquency	Traffic
Decorations	Uniform Crime Reporting
Finance	

4. Steering Committee on Law Enforcement Science and Technology.

Chairman: Lt.Col. E.A. Spearing, M.B.E.
Immediate Past President,
Canadian Association of Chiefs
of Police,
Director of Investigation,
Canadian National Railways,
Montreal, Que.

Secretary: D.N. Cassidy,
Secretary-Treasurer,
Canadian Association of Chiefs
of Police,
Director of Police and Security,
National Harbours Board,
Ottawa, Ont.

Police Advisors: Superintendent C.R. Eves, Ph.D.,
Director, National Police Services,
Royal Canadian Mounted Police,
Ottawa, Ont.

Mr. Guy Tardif,
Planning and Research,
Police Department,
Montreal, Que.

Asst. Commr. A.H. Bird,
Ontario Provincial Police,
Toronto, Ont.

Supt. J. Ackroyd,
Metropolitan Police,
Toronto, Ont.

Inspector P.A. Easler,
Crime Detection Laboratory,
Police Department,
Vancouver, B.C.

Consultants: A.H. Hall, B.Sc., M.Sc.(Caltech),
Head, Structures & Materials Laboratory
National Aeronautical Establishment,
National Research Council,
Ottawa, Ont.

E.A.G. Shaw, B.Sc., Ph.D.(London)
Senior Research Officer,
Division of Applied Physics,
National Research Council,
Ottawa, Ont.

5. Affiliations:

Closely associated with the following groups as many of
our members belong to provincial, regional and inter-
national associations of police chiefs:

Maritime Association of Chiefs of Police
Quebec Police and Fire Chiefs Association
Ontario Association of Chiefs of Police
Western Chiefs of Police Conference
International Association of Chiefs of Police

APPENDIX II

LAW ENFORCEMENT ASSISTANCE ACT, UNITED STATES

1. The Law Enforcement Assistance Act (LEAA) has been in effect for three years. It was designed to foster new approaches, new capabilities and new resources for dealing with crime and criminals. Briefly, the Act authorizes the Attorney General of the United States to make grants to, or contract with, public or private non-profit agencies to improve training of personnel, advance the capabilities of law enforcement bodies and assist in the prevention and control of crime. The Act also authorizes the Attorney General to conduct studies, render technical assistance, evaluate the effectiveness of programs undertaken, and disseminate knowledge gained as a result of such projects. Police, courts, corrections and other mechanisms for the prevention and control of crime are all within its scope.
2. The Law Enforcement Assistance Act was conceived as part of a larger and comprehensive program to increase federal participation in the United States efforts to cope with rising crime.
3. The LEAA program is administered by the Attorney General through the Justice Department's Office of Law Enforcement Assistance. The staff of this office work with advisory panels constituted by the Attorney General to review specific projects and provide general program guidance and is the focal point for development of programs, processing of applications, monitoring projects, and day to day grant administration.
4. Appropriation in the amount of \$7.249 million, \$7.25 million and \$7.5 million were approved by Congress for the three fiscal years (1966, 1967, and 1968) during which the Act has been operative. The first grant award

was made in December, 1965 and to April, 1968, 330 separate projects have received nearly \$19 million in assistance awards.

5. On April 25, 1968 the Attorney General reported to the President and Congress of the United States:

"Pursuant to the provisions of Section 11, Public Law 89-197, I am pleased to submit this report on activities under the Law Enforcement Assistance Act of 1965.

The Department of Justice has, in 30 months, granted some \$19 million for 330 criminal justice projects in 50 states, the District of Columbia, the Virgin Islands, Guam and Puerto Rico.

The Act has helped awaken America to the need for a national renaissance in law enforcement and criminal justice.

Comprehensive Law Enforcement Assistance (LEA) programs have motivated state and local governments toward significant actions, strengthening the fabric of our criminal justice system:

-- 27 grants have financed state crime evaluation and planning commissions. None existed before this program. Each provides a major opportunity to implement the recommendations of President Johnson's Crime Commission and to effect other important improvements. Each state has been urged for more than two years to form such a commission. Each state needs one.

-- 34 grants to police departments have financed police-community relations programs addressed directly to law enforcement's most pressing problem.

-- 27 grants have been awarded for police-science courses in colleges and universities, nearly doubling the number of states with schools offering such study. These courses provide a major opportunity for professionalization of police.

-- More than 650 police departments, with federal support, are using filmed and printed training materials carefully developed by experts under the supervision of the International Association of Chiefs of Police.

-- 21 states have received grants to develop comprehensive training programs for correctional officers in prison, probation and parole work. Only six states had such programs previously. These programs can have a profound long range impact on the recidivist who commits most controllable crime.

-- 20 states have received grants to develop or improve state police standards and training activities. These grants can begin statewide improvement of law enforcement.

-- 120 police departments have participated in riot prevention and control seminars sponsored by the International Association of Chiefs of Police and the Department of Justice.

This pioneer program of modest federal financial assistance has stimulated exciting innovations in the science of law enforcement, which when fully implemented will make a safer America.

The National Crime Information Center, financed through the LEA program, is the most advanced and needed crime data operation ever undertaken in the United States. Programmed to prevent invasion of privacy, it offers police throughout the nation instant fact on stolen property and wanted felons. Several hundred identifications are being made each week through this computerized service.

Significant research projects have been financed through the LEA program. These include a comprehensive study of the application of science and technology to criminal justice, a study on pooling police services, a survey of unreported crime which tells us much about the silent sufferance of crime and how to remedy it, and national surveys of police laboratory needs, correctional agency capabilities and police-community relations programs and problems.

These are but a few of the many projects supported by LEA. New scientific and technological advances have been developed and applied to criminal justice; new techniques have been devised, new experiences gained, new concepts tested, new knowledge passed on to all relevant agencies; proven programs have been expanded.

Unquestionably, LEA as small as it is, has provided significant stimulation toward implementation of the Crime Commission's recommendations. More than all else, it clearly demonstrates the great need for and the feasibility of the massive financing promised by the Safe Streets and Crime Control Act. LEA has pioneered the way. It is time now for the vast reforms so urgently needed."

6. 6 In the conclusion to his report it is stated:

"With federal, state and local criminal justice agencies spending more than \$4.5 billion annually for crime control and the public cost of crime totaling far in excess of that amount, it is clear that LEAA, even with the most efficient utilization of its modest resources, could hope for but limited impact. Yet, on a scale perhaps unusual for a program of this size, major law enforcement and criminal justice agencies, universities, research organizations, and professional associations across the nation have undertaken important and needed work under the stimulus of LEAA aid. Many States and localities, moreover, have been assisted in advancing from "have not" to "have" status in important areas of criminal justice capability.

Since most projects remain to be completed, a definitive assessment of the LEAA effort is not possible. Unfortunately, OLEA's inability to secure the increasing level of appropriations envisioned by Congressional authorizations and Departmental requests has prevented the kind of growth which would have maximized the value and effect of its programs. Nonetheless, the contribution discerned at the writing of the Second Annual Report has, if anything, been confirmed by an additional year of program effort. Briefly stated:

-- The LEAA program has made possible a variety of projects to aid and advance law enforcement capabilities. In varying degree these will help set standards, provide models, produce knowledge and build structures needed for a more effective response to the crime problem.

-- The program has served as a preparation and laboratory for the expanded grant-in-aid partnership required for the war on crime. It has given the Department experience and perspectives in the methods and techniques of federal assistance, the problems and dilemmas of grant program administration, and the type of "client" it serves in dealing with state and local law enforcement.

-- LEAA has been a moving force, though not the only one, in a process that has been preparing law enforcement to examine its problems and move more vigorously toward their resolution.

Experience continues to indicate the critical importance of a substantial expansion of the "research and development" effort assigned to LEAA. It has shown also the Act's inability to respond to existing needs which require national subsidy support for our crime-fighting institutions. Both of these problems have been recognized in plans for the future and are embodied in legislation now pending before the Congress -- the proposed Safe Streets and Crime Control Act of 1967. Under this legislation, the experimental work of LEAA would be continued, expanded, and combined with a companion program for grant-in-aid support reaching into all states and localities willing to join with the Federal Government in increasing local commitment to law enforcement and criminal justice improvement. President Johnson has requested \$100 million as an initial appropriation for this program. Substantial and rapid growth beyond this is contemplated in the years ahead."

APPENDIX III

HOME OFFICE SCIENTIFIC COUNCIL

1. The Home Office Scientific Advisory Council was set up in 1965. Its terms of reference are to advise the Home Secretary on the scientific aspects of research for the police service including forensic science. The Advisory Council has two committees: a Forensic Science Committee and a Police Equipment Committee.
2. Members of the Scientific Advisory Council are drawn from academic and industrial fields and are representative of a wide range of scientific disciplines; they are, therefore, collectively equipped to take an embracing view of the problems of police research. As a council they consider the projects in hand and subject them to careful analysis, sometimes suggesting a fresh approach or an improvement of methodology; they do not undertake projects although, on occasions, individual members are able to furnish assistance out of the scientific resources at their command or which they are able to influence.
3. The Council meets on an average of four times a year but its two committees, i.e. Forensic Science Committee and Police Equipment Committee, meet more frequently to consider projects.
4. Members of the Council give their service without fee and are reimbursed for out of pocket expenses.
5. It is worthy to report the Recommendations contained in the First Report of the Home Office Scientific Advisory Council issued May 7, 1968:

RECOMMENDATIONS

"Having carried out a comprehensive survey of the areas of research within our terms of reference, we recommend, in regard to the forensic science service, that:

- (i) increasing productivity of the forensic science service resulting from the application of improved methods cannot be expected to match the constantly rising case load and plans should be made urgently for commensurate increases of staff in future years.
- (ii) the forensic science laboratory of the future should be planned and built with the long term needs of the service in mind; and we strongly support the re-building programme which has been started by the Home Office;
- (iii) greater use should be made of modern methods of chemical analysis;
- (iv) to avoid duplication of expensive equipment and skilled manpower plans should be made for specialized facilities, served by advanced methods of data handling and intercommunication, to be concentrated into a centralised service co-ordinated by the Home Office;
- (v) because of the health hazard, we consider that the benzidine test should be replaced as soon as possible by alternatives which employ non-carcinogenic reagents;
- (vi) the technique of neutron activation analysis and mass spectrometry for the examination of trace elements should be exploited urgently.

We also recommend, in regard to police equipment, that:

- (vii) further consideration should be given to the application of the most advanced electronic techniques to problems of surveillance, intruder detection and communications;
- (viii) as research into the location and identification of hidden objects is being carried out by Defence Departments, the review of available techniques should, if possible, include their work in this field;
- (ix) the planned experiments in the use of simple scientific techniques in searching scenes of crime should be speedily completed;
- (x) the Home Office programme of research into automatic finger print retrieval should continue to be flexible enough to allow the most promising lines to be readily followed.

FUTURE PROGRAMME

Your Council is to meet on a number of occasions during 1968. In addition to continuing its review of the topics mentioned in this report it is intended to consider the field of operational research since this has a strong bearing upon the aspects of police research upon which it is our duty to advise."

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